CIT RELAY & SWITCH™
Division of Circuit Interruption Technology, Inc.

A3

RoHS Compliant

28.5 x 28.5 x 26.5 (40.0) mm

Features

- Large switching capacity up to 80A
- PCB pin and quick connect mounting available
- Suitable for automobile and lamp accessories
- QS-9000, ISO-9002 Certified Manufacturing

Contact Data

Contact Arrangement	1A = SPST N.O. 1B = SPST N.C. 1C = SPDT 1U = SPST N.O. (2 terminals)		
Contact Rating		Standard	Heavy Duty
	1A	60A @ 14VDC	80A @ 14VDC
	1B	40A @ 14VDC	70A @ 14VDC
	1C	60A @ 14VDC N.O.	80A @ 14VDC N.O.
		40A @ 14VDC N.C.	70A @ 14VDC N.C.
	1U	2x25A @ 14VDC	2x25@ 14VDC

Contact Resistance	< 30 milliohms initial
Contact Material	$AgSnO_2In_2O_3$
Max Switching Power	1120W
Max Switching Voltage	75VDC
Max Switching Current	80A

Coil Data

Coil Voltage VDC		Coil Resistance Ω +/- 10%	Pick Up Voltage VDC (max) 70% of rated voltage	Release Voltage VDC (min) 10% of rated voltage	Coil Power W	Operate Time ms	Release Time ms
Rated	Max	1.8W					
6	7.8	20	4.20	.6	1.80	7	5
12	15.6	80	8.40	1.2			
24	31.2	320	16.80	2.4			

General Data

Electrical Life @ rated load	100K cycles, typical
Mechanical Life	10M cycles, typical
Insulation Resistance	100M Ω min. @ 500VDC
Dielectric Strength, Coil to Contact	500V rms min. @ sea level
Contact to Contact	500V rms min. @ sea level
Shock Resistance	147m/s² for 11 ms
Vibration Resistance	1.5mm double amplitude 10~40Hz
Terminal (Copper Alloy) Strength	8N (quick connect), 4N (PCB pins)
Operating Temperature	-40°C to +125°C
Storage Temperature	-40°C to +155°C
Solderability	260°C for 5 s
Weight	46g

Caution

1. The use of any coil voltage less than the rated coil voltage may compromise the operation of the relay.

Dimensions shown in mm. Dimensions are shown for reference purposes only.

Specifications and availability subject to change without notice.

Ordering Information

1. Series A3 standard A3F with mounting flange A3M with metal bracket	A3F	1C	S	Q	24VDC	2
2. Contact Arrangement 1A = SPST N.O. 1B = SPST N.C. 1C = SPDT 1U = SPST N.O. *only available with standard contacts						
3. Sealing Option S = Sealed *Sealing only available with heavy duty contacts C = Dust Cover						
4. Termination P = PCB Pins Q = Quick Connect						
5. Coil Voltage 6VDC 12VDC 24VDC						
6. Contacts 1 = Standard *Sockets for thes modesl can be found on the CIT Relay Socket catalog page 2 = Heavy Duty *We recommend the PR series socket from Custom Connector Corporation						
7. Coil Suppression Blank = Standard D = Diode (1N4005) Cathode on “86” terminal R = Resistor (180Ω for 6VDC; 680Ω for 12VDC; 2700Ω for 2VDC) 2D = 2 Diodes (1N4005) DR = Diode & Resistor Cathode on “86” terminal (1N4005 & 180Ω for 6VDC; 680Ω for 12VDC; 2700Ω for 2VDC) ** Consult factory if other values are needed						

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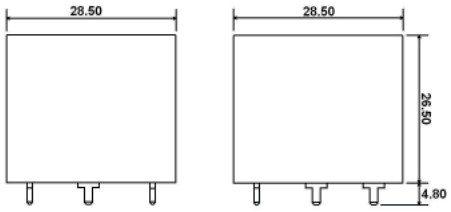
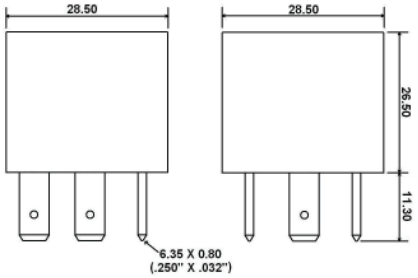
Dimensions A3

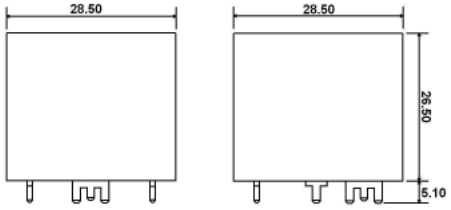
Units = mm



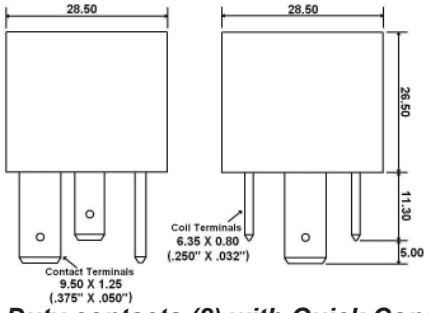
Standard contacts (1) with PC Pin



Standard contacts (1) with Quick Connect



Heavy Duty contacts (2) with PC Pins



Heavy Duty contacts (2) with Quick Connects

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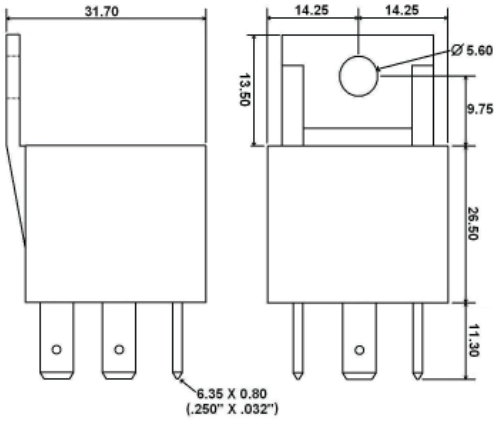
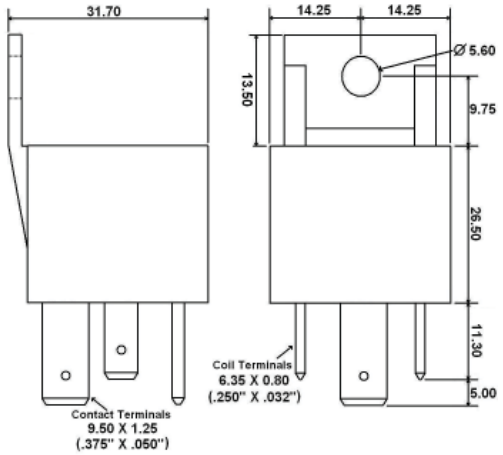
www.citrelay.com
phone - 763.535.2339 fax - 763.535.2194

Dimensions A3F

Units = mm



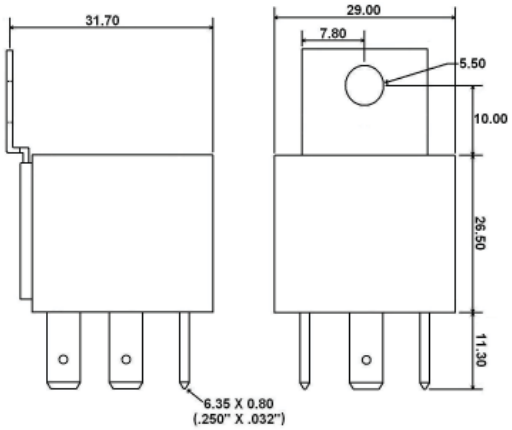
Standard contacts (1) with Quick Connect



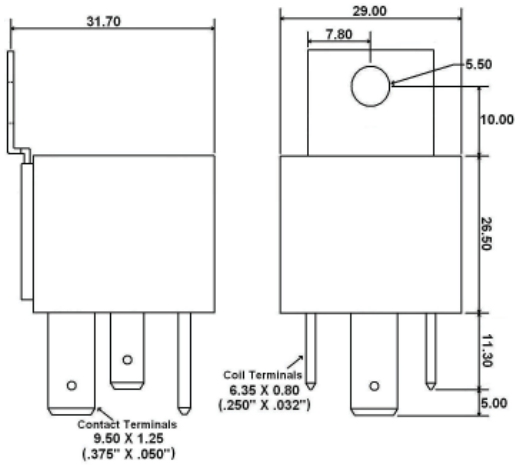
Heavy Duty contacts (2) with Quick Connects

Dimensions A3M

Units = mm



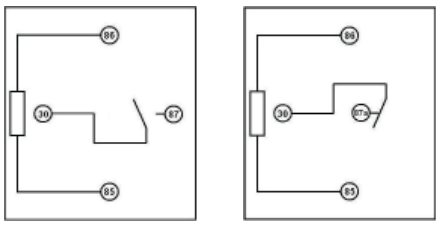
Standard contacts (1) with Quick Connect



Heavy Duty contacts (2) with Quick Connects

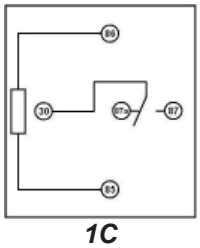
Schematics, PC Pin Dimensions & PC Layouts

Bottom Views

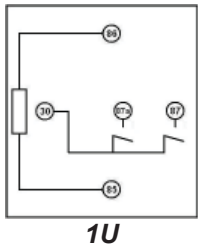


1A

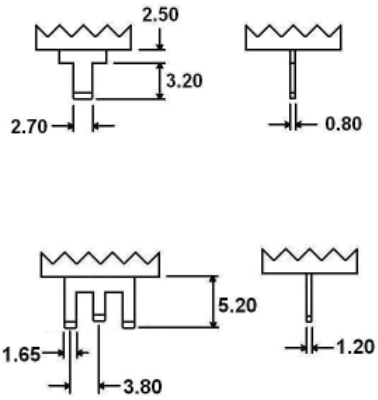
1B

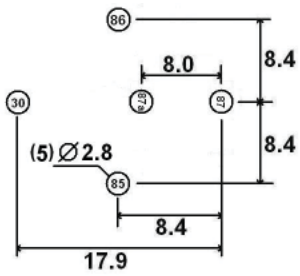


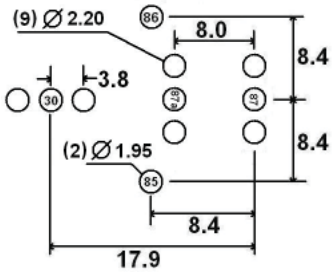
1C



1U







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